# **BookletChart**

# **Charleston Harbor Entrance**

(NOAA Chart 11523)



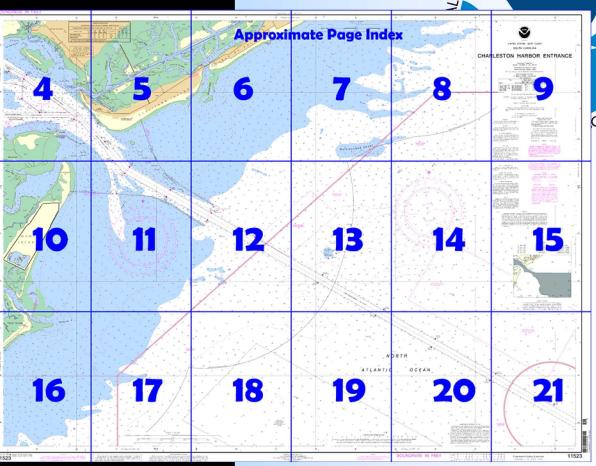
A reduced scale NOAA nautical chart for small boaters. When possible, use the full size NOAA chart for navigation.

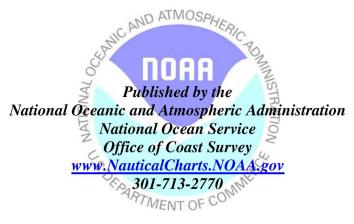
- ☑ Complete, reduced scale nautical chart
- ✓ Print at home for free
- ☑ Up to date with all Notices to Mariners

NOAA

Home Edition (not for sale)

- ☑ United States Coast Pilot excerpts
- Compiled by NOAA, the nation's chartmaker.





# What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

# What is a BookletChart<sup>™</sup>?

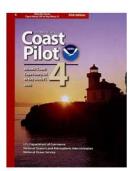
This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <a href="http://www.NauticalCharts.NOAA.gov">http://www.NauticalCharts.NOAA.gov</a>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

## **Notice to Mariners Correction Status**

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.



# [Coast Pilot 4, Chapter 6 excerpts]

(88) Charleston Harbor is the approach to Charleston and the Cooper, Wando and Ashley Rivers. The harbor is easy of access day or night in clear weather, and is one of the best harbors of refuge on the South Atlantic coast.

- (89) The areas to the east and southeast of Charleston Harbor are used by the U.S. Navy to conduct training exercises.
- (91) The entrance to Charleston Harbor is between converging jetties that extend 3 miles

seaward. **Fort Moultrie** and the town of **Sullivans Island** are on the north side of the entrance; **Fort Sumter** is on the southwest side. (93) **Charleston Light** (32°45'30"N., 79°50'36"W.) 163 feet above water, is shown from a triangular tower, upper half black, lower half white, on Sullivans Island.

- (101) Not infrequently, portions of Charleston Harbor are affected by poor visibility during squalls of heavy rain, rare snow squalls, and fog. Fog associated with a generalized weather pattern occasionally settles over the entire port area including the fairways offshore. Fog over only a part of the harbor is a frequent occurrence.
- (103) During periods of low visibility, the Charleston Branch Pilots provide information to Navy Port Services Division and the National Weather Service on actual visibility conditions experienced. The pilot office monitors VHF-FM channels 13, 14, 16 and 18A on a continuous basis.
- (107) **Intracoastal Waterway.** This represents the eastern conjunction of this waterway with Rebellion Reach. Westbound vessels proceeding into Charleston Harbor are not visible to vessels inbound from sea until they clear the northernmost part of Sullivans Island. Every effort, including holding, should be made to avoid restricting deep-draft vessels transiting the main ship channel, and allow them to clear this area.
- (113) Small craft should take precautions whenever anchoring in close proximity to the channels by maintaining a lookout, displaying navigational lights, and exercising good seamanship. Small craft are subject to the hydraulic and hydrodynamic effects generated by deepdraft vessels passing in the main channels even when such deep-draft vessels are proceeding at slow speeds. These effects can cause surging and generate high waves. Vessels anchored in shallow water seeing the approach of a deep-draft vessel should get underway and meet these hydraulic and dynamic effects in a safe and seamanlike manner. Small craft should never anchor by the stern nor moor to the rock jetties, aids to navigation or bridge abutments.
- (128) The entrance to Charleston Harbor is between converging jetties, the inner portions of which are submerged. An opening in the south jetty is marked by buoys.
- (129) A Federal project provides a channel 47 feet deep over the Bar and through the Harbor entrance, thence 45 feet into the Cooper River, Wando River and Town Creek to Goose Creek; and a connecting channel into Shipyard Creek 32 feet deep. A 35-foot channel extends from the head of the Federal project in Cooper River to a turning basin at a naval facility, above Goose Creek; thence 30 feet for 0.8 mile. **South Channel** is no longer maintained. The depths were 24 feet from a junction with Rebellion Reach to a junction with Ashley River channel, thence 24 feet to off the Battery. The channels are well marked by lighted ranges and aids to navigation. Charleston Entrance Lighted Whistle Buoy C (32°37'05"N., 79°35'30"W.) is 15 miles southeast of Charleston Light and is equipped with a racon.
- (131) The danger area of a former World War II minefield is off the entrance to Charleston Harbor. The area is open to surface navigation but all vessels are cautioned not to anchor, dredge, trawl, lay cables, bottom, or conduct any similar type. An "anchor at your own risk" anchorage, within the danger area, is on the north side of the entrance channel. (136) Vessels have routinely anchored in this offshore anchorage for many years without mishap.
- (138) Vessels approaching Charleston Harbor must guard against an inshore set which may amount to a knot or more due to indraft of current into the various inlets. In this area, a hazy atmospheric condition may be encountered, which results in low visibility of lights even in fine weather when it is clear overhead. During the periods when this condition prevails, it is reported that excessive inshore sets have been experienced. (139) **Rattlesnake Shoal**; its least depth is 10 feet. A buoy is E of the outer end of the shoal.
- (143) Off the entrance to Charleston Harbor the tidal currents are rotary with velocities of about 1 knot.
- (144) It is reported that tide rips, hazardous to small craft, may be encountered off the jetties when wind and current are opposed.(145) It is reported that with a west-northwesterly storm the ebb current off Fort Sumter and north of Drum Island attains a velocity of about 4 knots.

# **Table of Selected Chart Notes**

Corrected through NM Apr. 12/08 Corrected through LNM Apr. 8/08

### HEIGHTS

Heights in feet above Mean High Water.

### PLANE COORDINATE GRID

(based on NAD 1927) The South Carolina plane coordinate grid (south zone) is indicated on this chart at 10,000 foot intervals thus: -+-

The last three digits are omitted.

### NOTE S

NOTE S
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.

### CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

### CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

### POLITION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

INTRACOASTAL WATERWAY The project depth from Winyah Bay to Charleston, S.C. is 12 feet. The controlling depths are published periodically in the U.S. Coast Guard Local Notice to Mariners.

### SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 4 for important supplemental information

### AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

### WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.634" northward and 0.690" eastward to agree with this chart.

### SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas

Cable Area Pipeline Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

Covered wells unlighted buoys.

# CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with cartifornia.

should be used with caution. Station positions are shown thus:

⊙(Accurate location) o(Approximate location)

### NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio station listed below provides continuous weather broadcasts The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations

Charleston, SC KHB-29 162.55 MHz For Symbols and Abbreviations see Chart No. 1

### RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

### DANGER AREA

Area is open to unrestricted surface navigation but all vessels are cautioned neither to anchor, dredge, trawl, lay cables, bottom, nor conduct any similar type of operation because of residual danger from mines on the bottom. Anchorage in the designated area is at your own risk.

### NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 4. Additions or revisions to Chapter 2 are pub-lished in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 7th Coast Guard District in Miami, Florida, or at the Office of the District Engineer, Corps of Engineers in Charleston South Carolina.

Refer to charted regulation section numbers.

### HURRICANES AND TROPICAL STORMS

HURRICANES AND TROPICAL STORMS
Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations.
Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved. Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

### AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast rvey, with additional data from the Corps of Engineers, and U.S.

### SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot

COLREGS: International Regulations for Preventing Collisions at Sea, 1972. Demarcation lines are shown thus:  $-\!-\!-\!-\!-$ 

### NOTE X

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The Pnautical mile Natural Resource Boundary of the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification. 43

# CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LIMM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at naulicalcharts.noae.gov.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

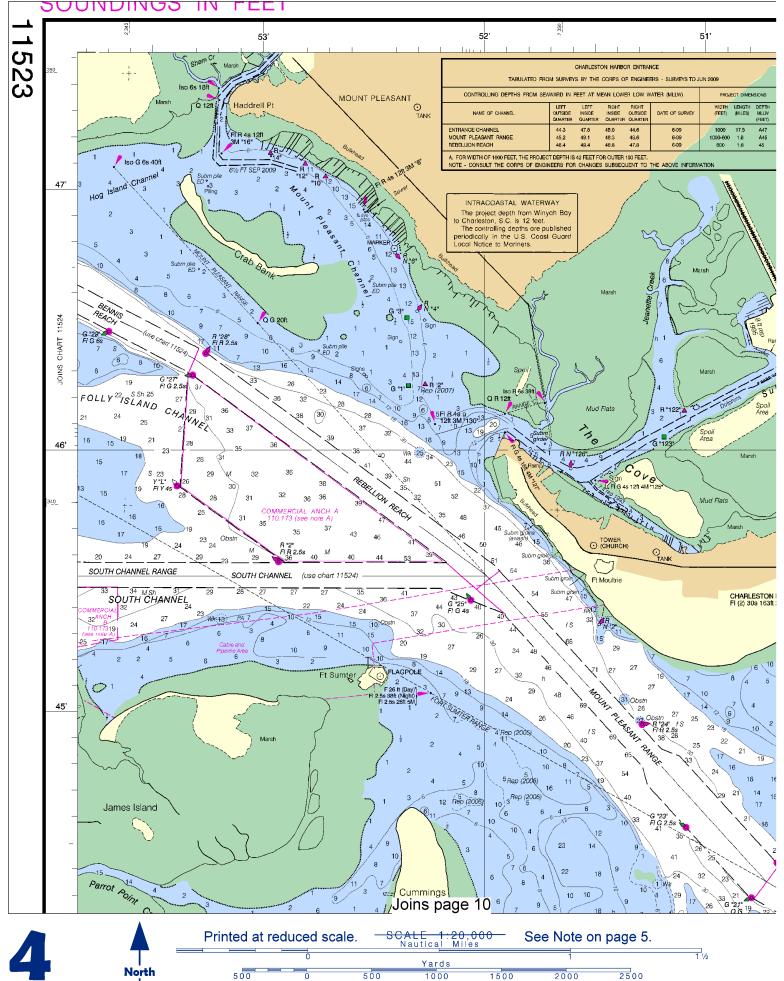
### TIDAL INFORMATION

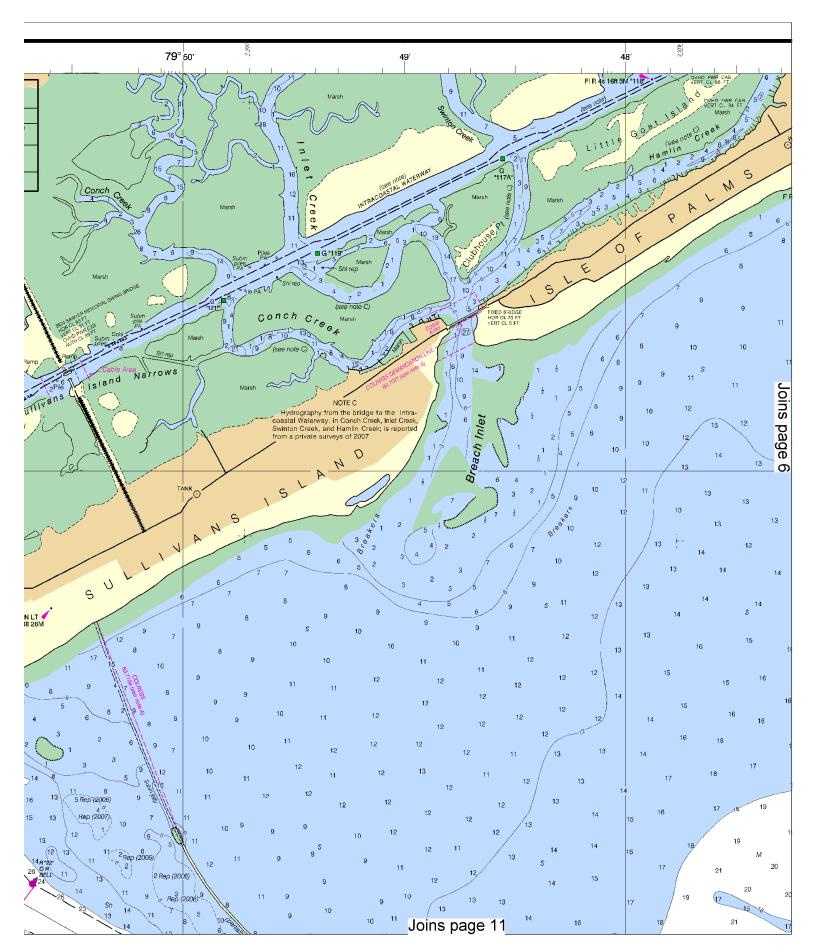
| PLACE              |                   | Height referred to datum of soundings (MLLW) |                    |                   |
|--------------------|-------------------|--|--------------------|-------------------|
| NAME               | (LAT/LONG)        | Mean Higher<br>High Water                    | Mean<br>High Water | Mean<br>Low Water |
|                    |                   | feet   | feet               | feet              |
| Isle of Palms Pier | (32°47'N/79°47'W) | 5.5  | 5.1                | 0.2               |
| Breach Inlet       | (32°47'N/79°49'W) | 5.5  | 5.1                | 0.2               |
| Ben Sawyer Bridge  | (32°46'N/79°50'W) | 5.6  | 5.2                | 0.2               |
| Fort Sumter        | (32°45'N/79°53'W) | 5.6  | 5.3                | 0.2               |
| Shem Creek         | (32°48'N/79°53'W) | 5.7  | 5.4                | 0.2               |

tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

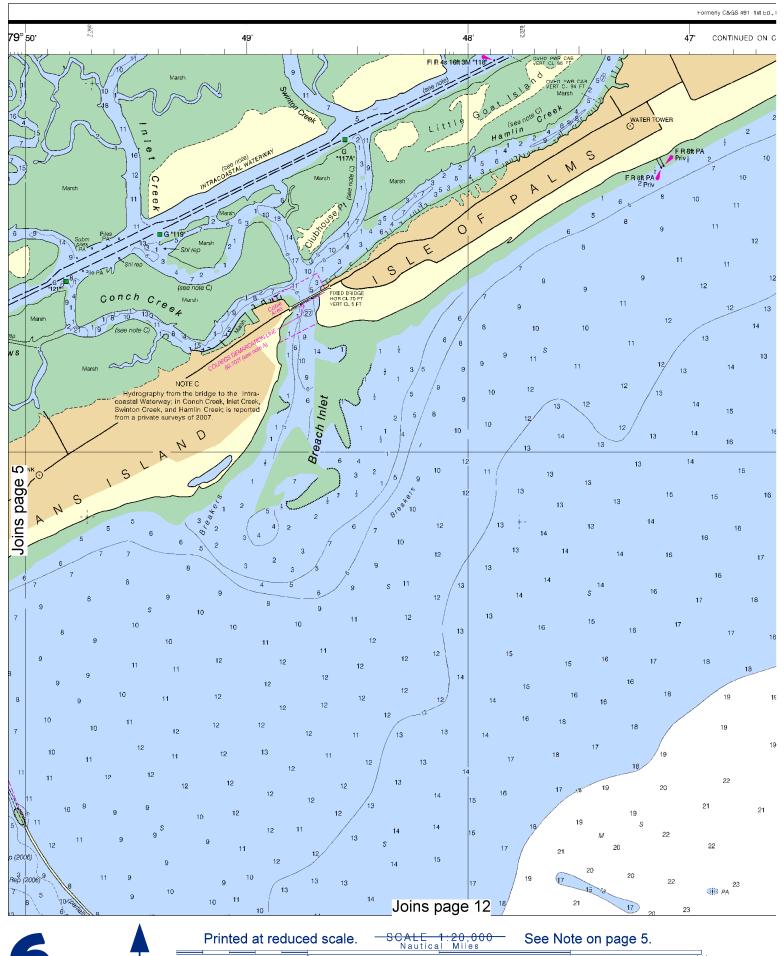
### PRINT-ON-DEMAND CHARTS

NOAA and its partner. OceanGrafix, offer this chart updated weekly by NOAA for Notices to Mariners and critical corrections. Charts are printed when ordered using Print-on-Demand technology. New Editions are available 5-8 weeks before their release as traditional NOAA charts. Ask your chart agent about Print-on-Demand charts or contact NOAA at 1-800-584-4688, http://NouticalCharts.gov, nelp@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http://OceanGrafix.com, or blew@OceanGrafix.com



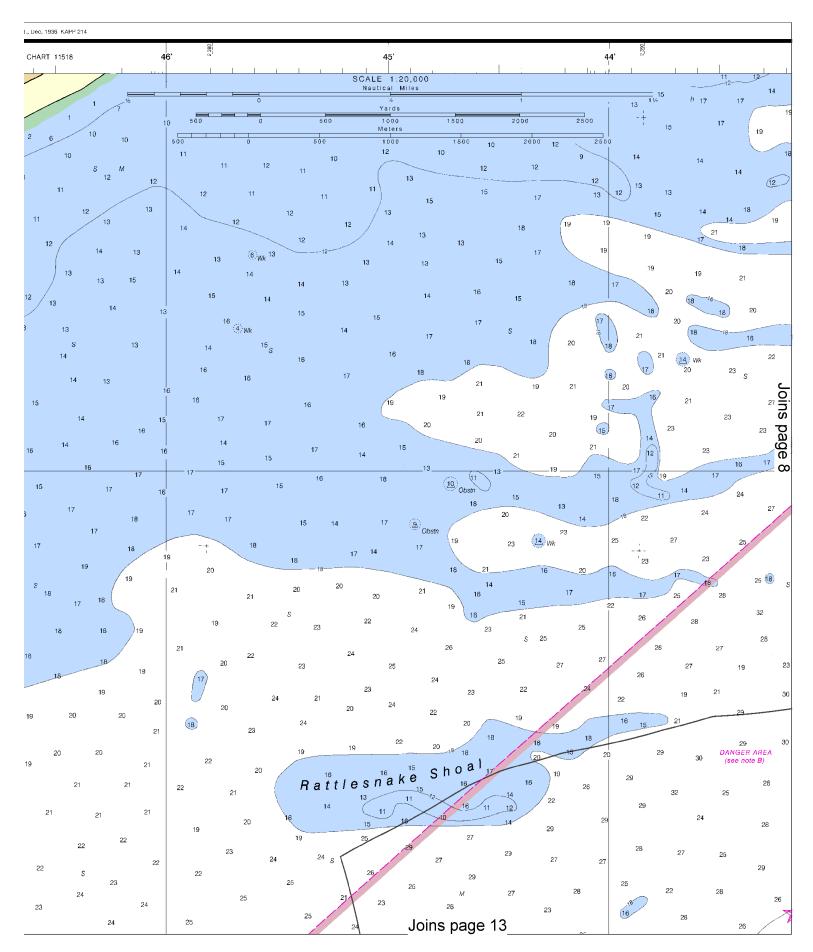


This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:26667. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

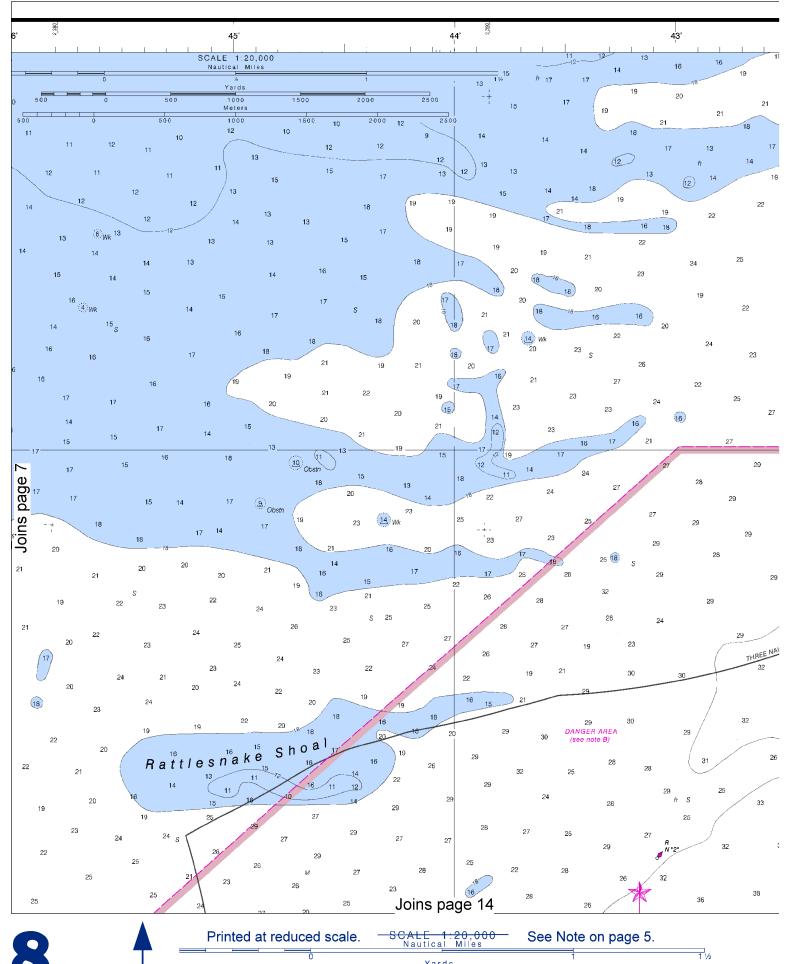




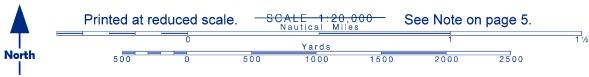


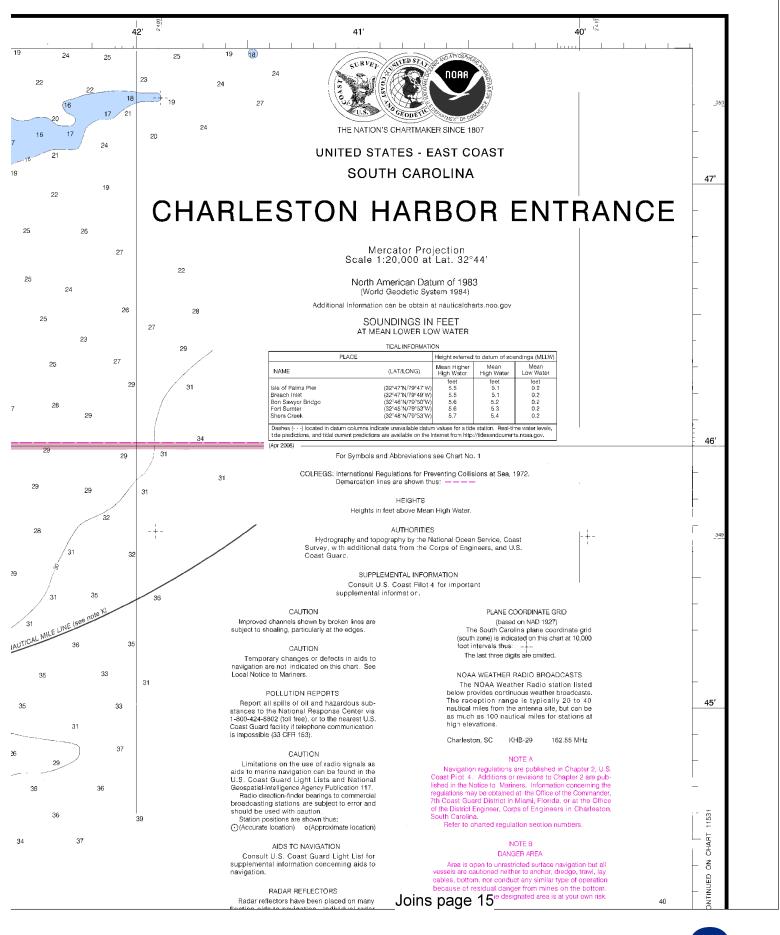


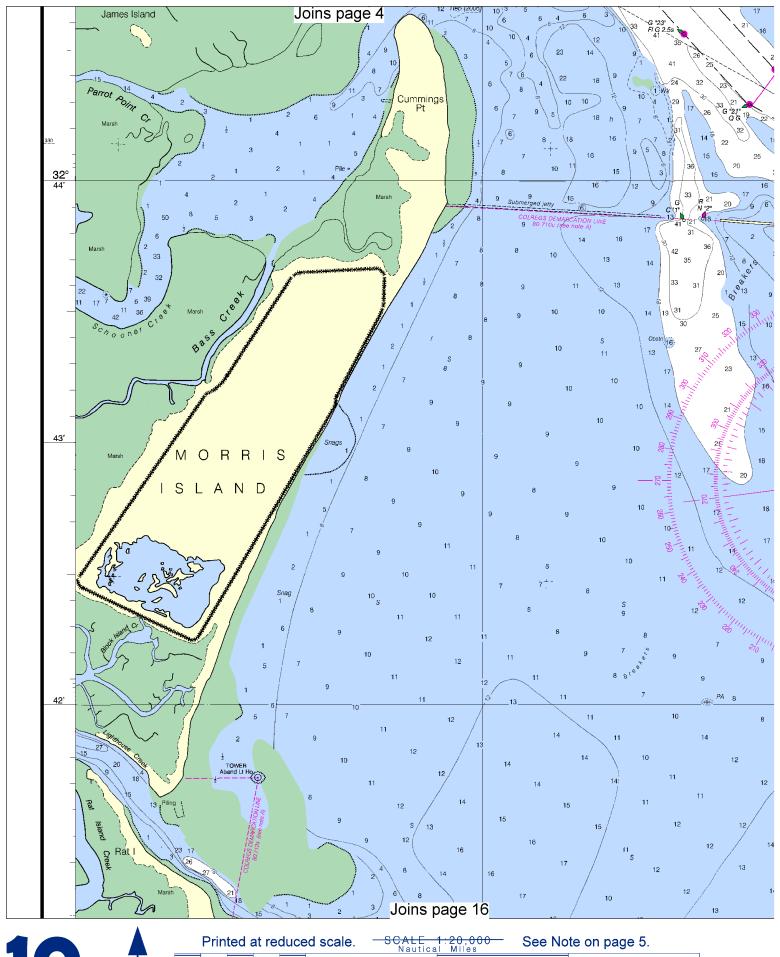
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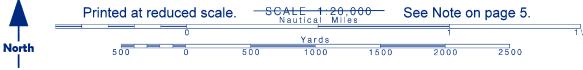


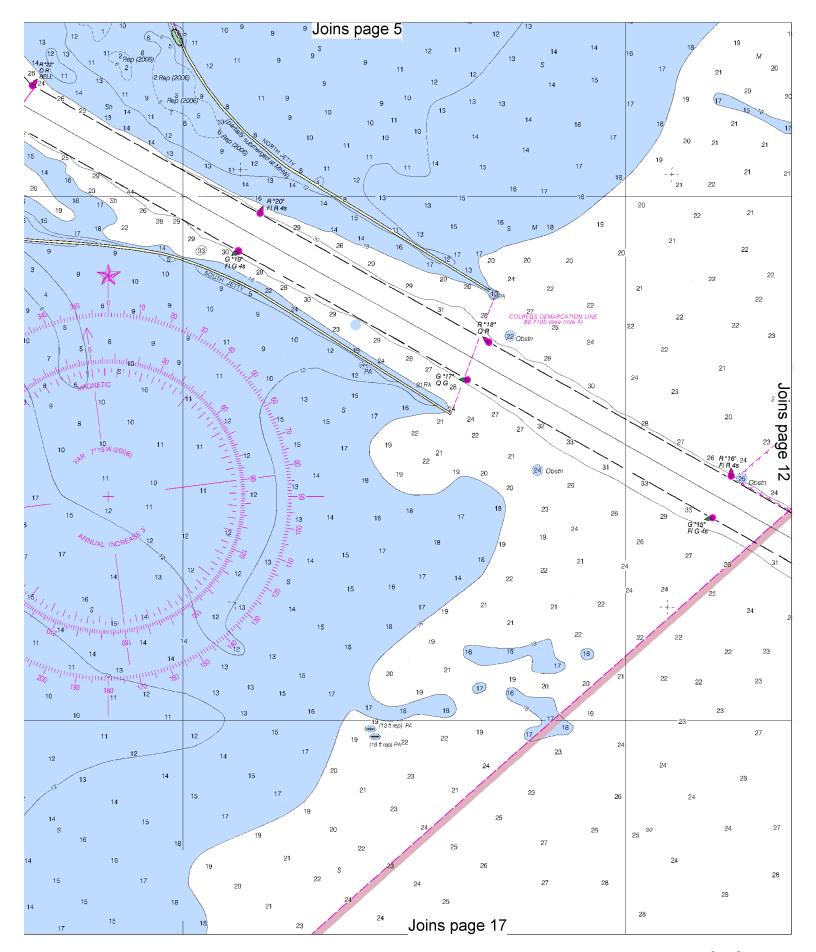


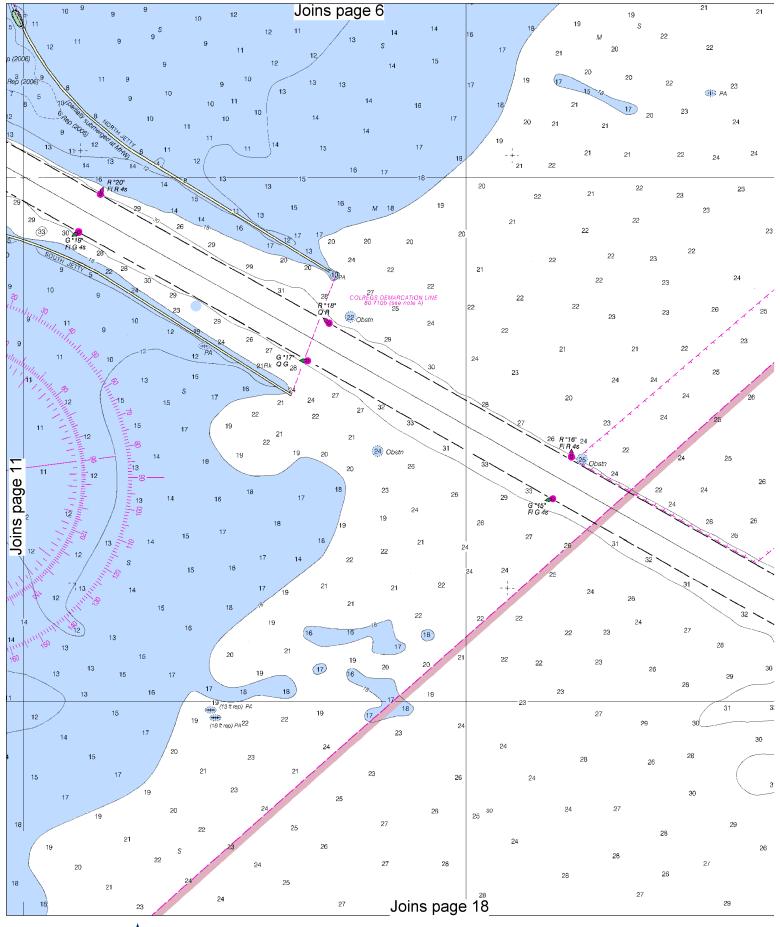




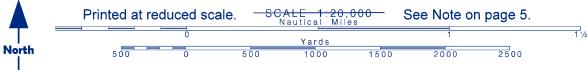


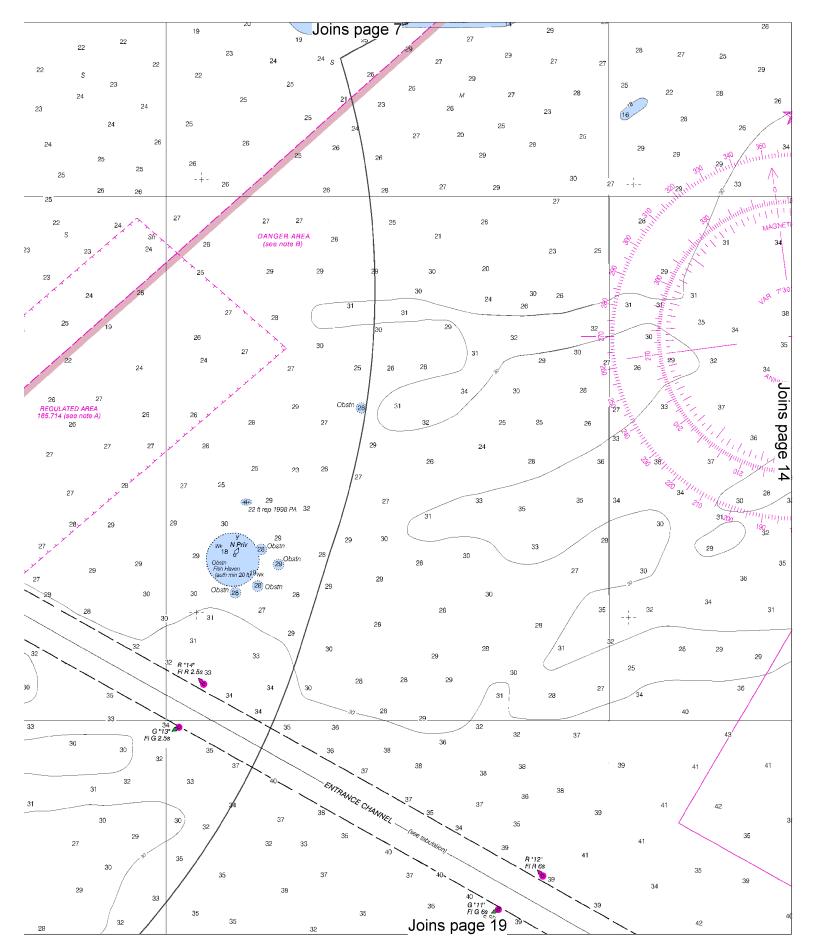


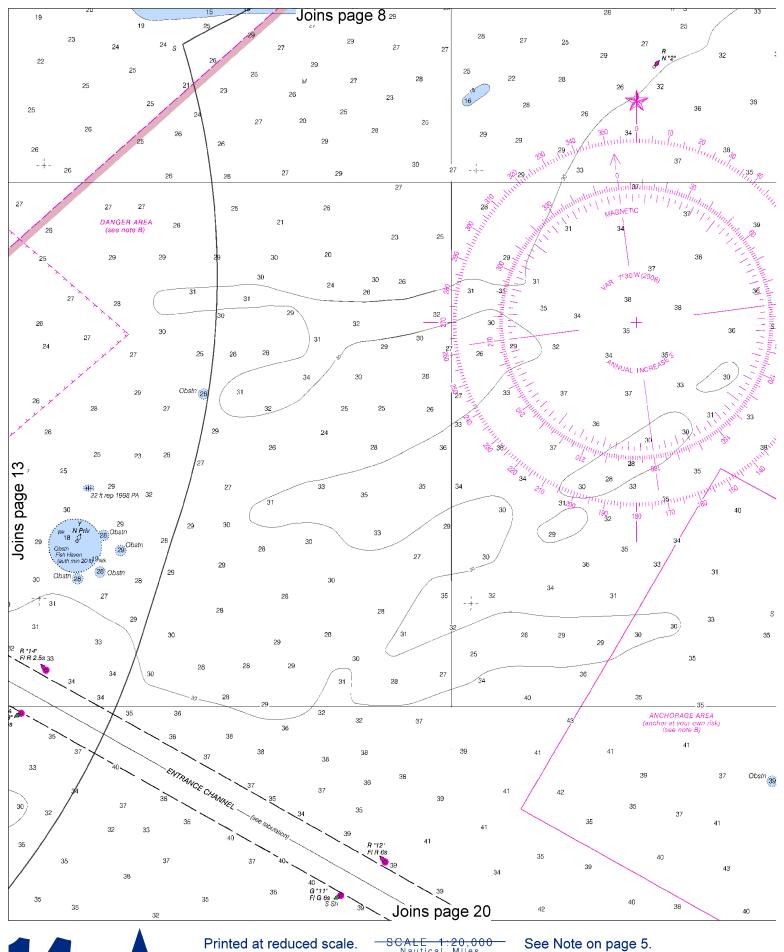




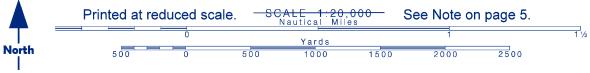


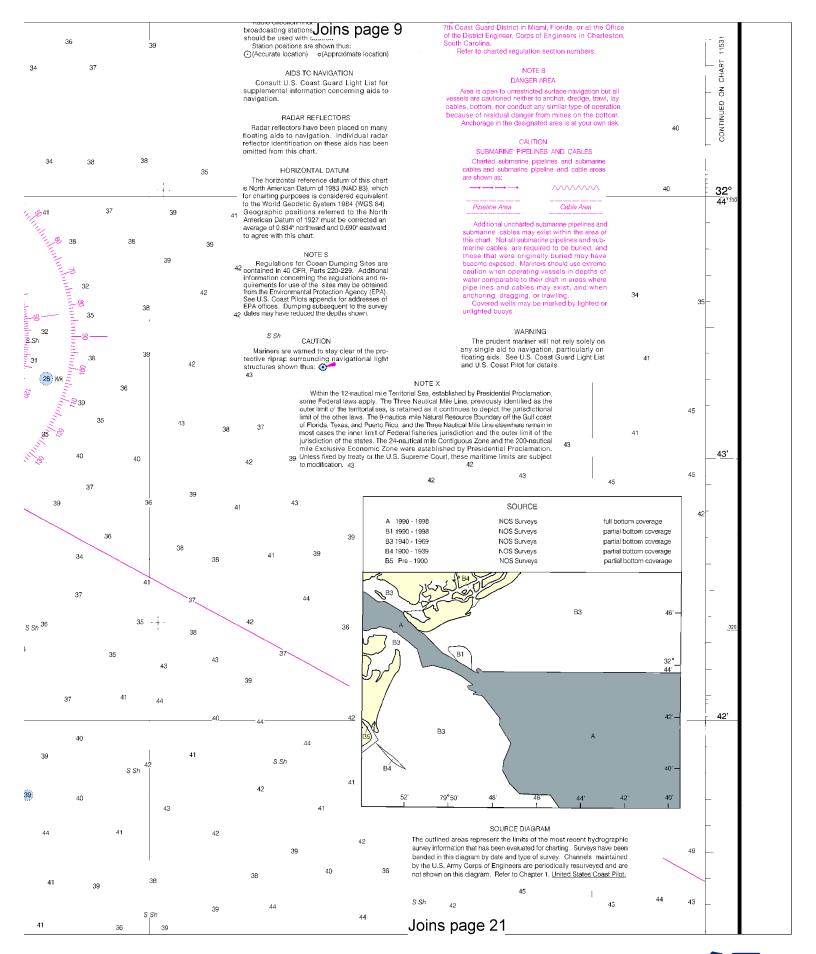


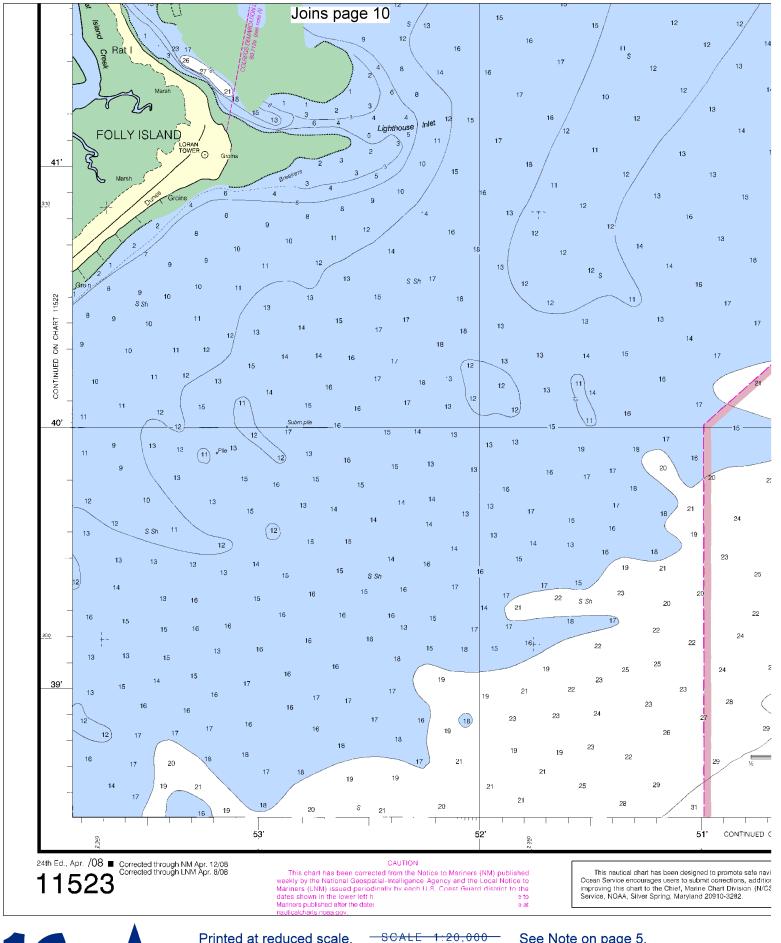




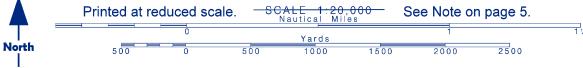


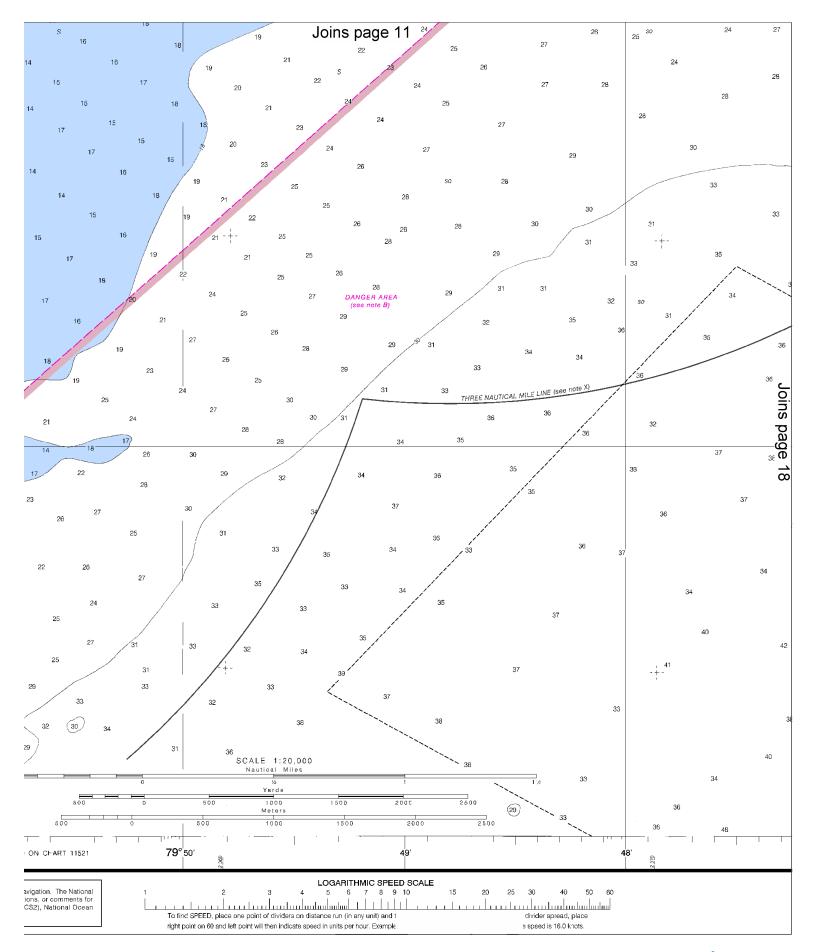


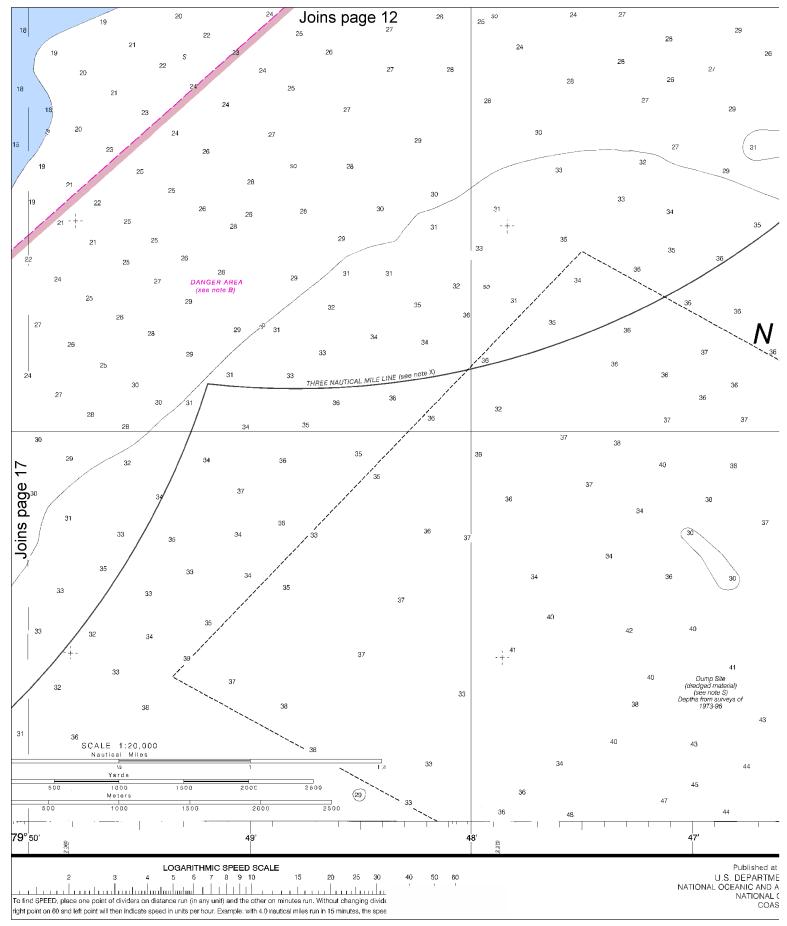






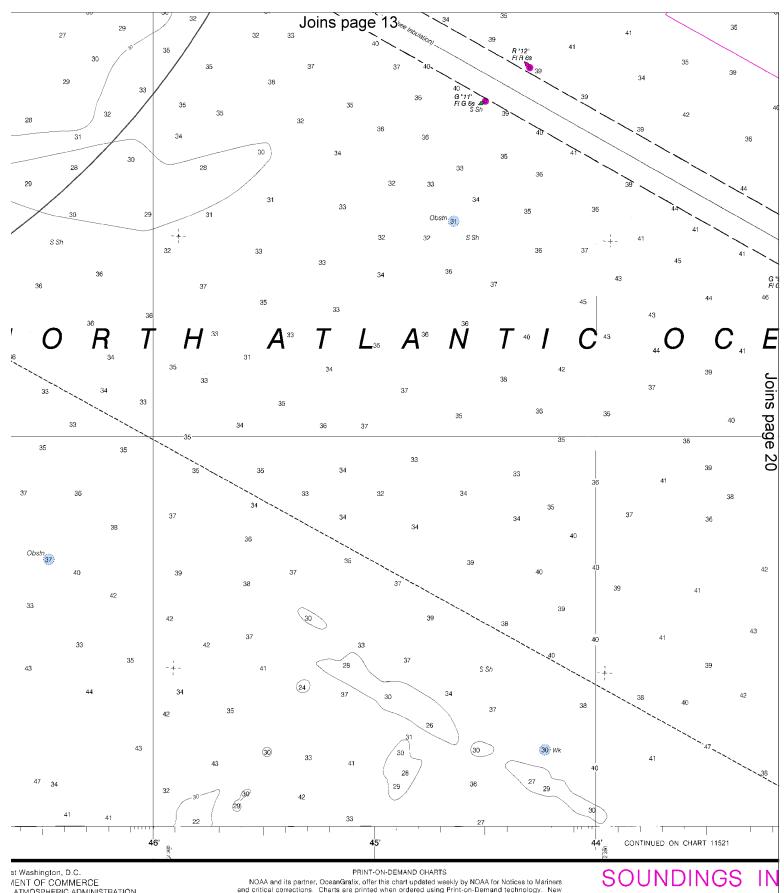






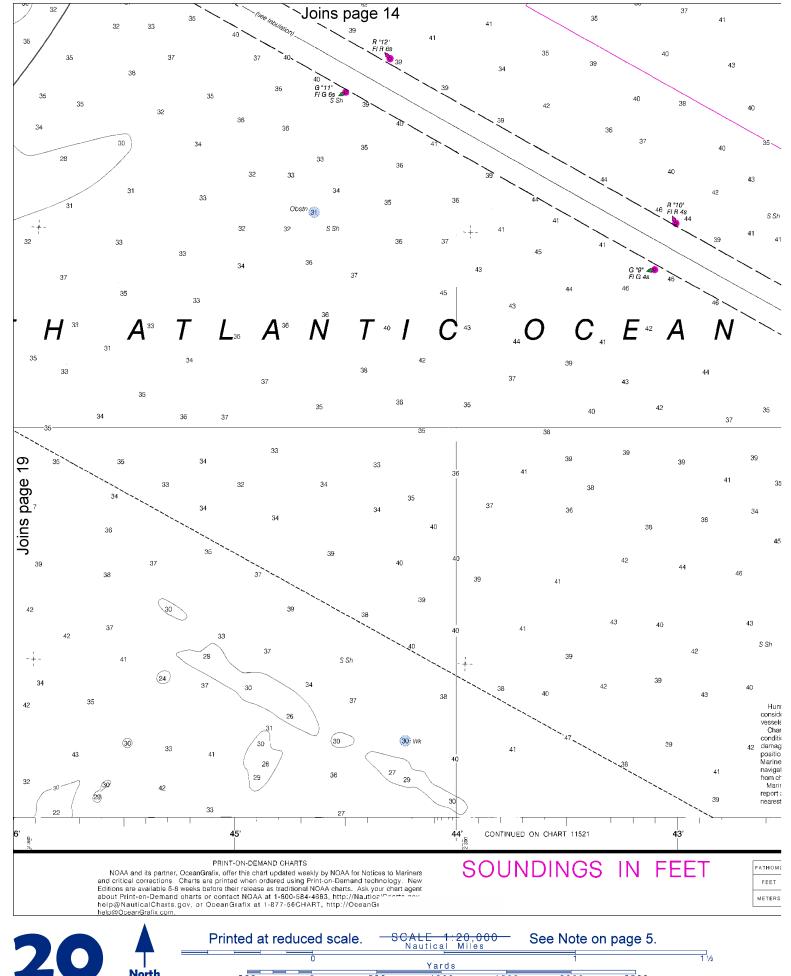




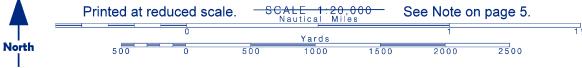


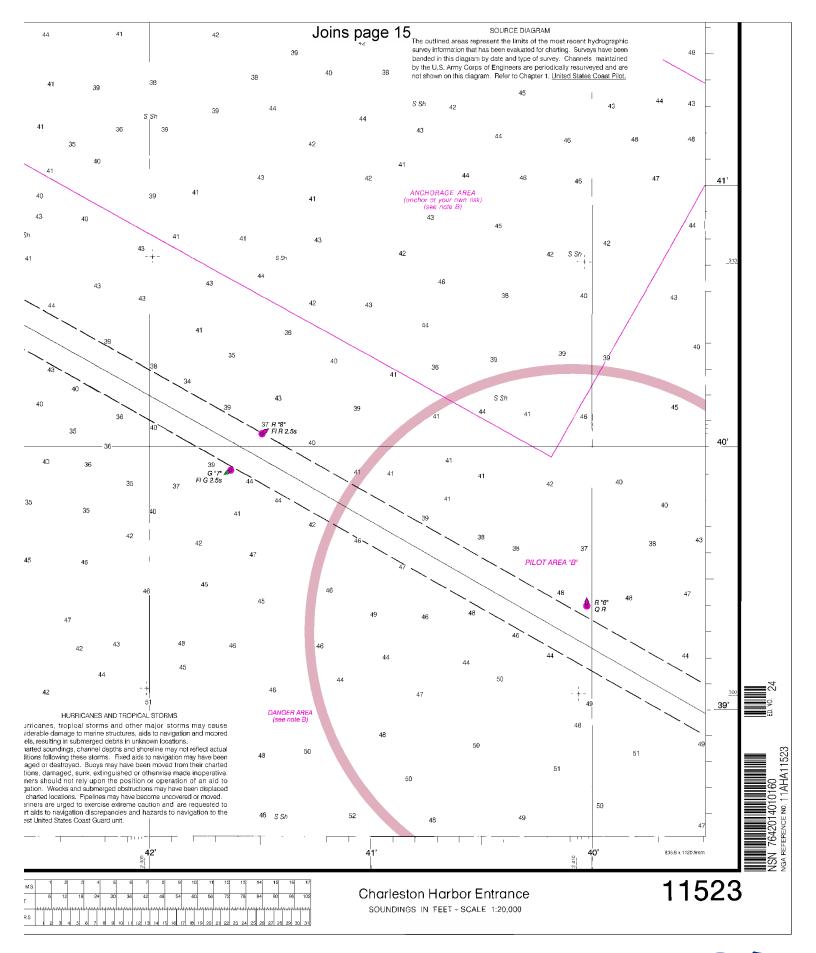
AENT OF COMMERCE
ATMOSPHERIC ADMINISTRATION
OCEAN SERVICE
AST SURVEY

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# **EMERGENCY INFORMATION**

# VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

**Channel 9** – Communications between boats and ship-to-coast.

**Channel 13** – Navigation purposes at bridges, locks, and harbors.

# Channel 16 – Emergency, distress and safety calls

to Coast Guard and others, and to initiate calls to other vessels. Contact the other vessel, agree to another channel, and then switch.

**Channel 22A** – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 & 78A – Recreational boat channels.

# **Distress Call Procedures**

- 1. Make sure radio is on.
- 2. Select Channel 16.
- 3. Press/Hold the transmit button.
- 4. Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- 6. Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY Call.

# HAVE ALL PERSONS PUT ON LIFE JACKETS!!

**Mobile Phones** – Call 911 for water rescue.

Coast Guard Charleston – 843-724-7616 Coast Guard Atlantic Area Cmd – 757-398-6390 SC Dept. of Natural Resources – 800-922-5431

<u>NOAA Weather Radio</u> – 162.400 MHz, 162.425 MHz, 162.450 MHz, 162.475 MHz, 162.500 MHz, 162.525 MHz, 162.550 MHz.

Getting and Giving Help – Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



# NOAA CHARTING PUBLICATIONS

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Official Print-on-Demand Nautical Charts – These full-scale NOAA charts are updated weekly by NOAA for all Notice to Mariner corrections. They have additional information added in the margin to supplement the chart. Print-on-Demand charts meet all federal chart carriage regulations for charts and updating. Produced under a public/private partnership between NOAA and OceanGrafix, LLC, suppliers of these premium charts are listed at <a href="https://www.oceanGrafix.com">www.oceanGrafix.com</a>.

# Official Electronic Navigational Charts (NOAA ENCs®) -

ENCs are digital files of each chart's features and their attributes for use in computer-based navigation systems. ENCs comply with standards of the International Hydrographic Organization. ENCs and their updates are available for free from NOAA at www.NauticalCharts.NOAA.gov.

# Official Raster Navigational Charts (NOAA RNCs<sup>™</sup>) –

RNCs are geo-referenced digital pictures of NOAA's charts that are suitable for use in computer-based navigation systems. RNCs comply with standards of the International Hydrographic Organization. RNCs and their updates are available for free from NOAA at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official BookletCharts<sup>™</sup> – BookletCharts<sup>™</sup> are reduced scale NOAA charts organized in page-sized pieces. The "Home Edition" can be downloaded from NOAA for free and printed. The Internet address is <a href="https://www.NauticalCharts.gov/bookletcharts">www.NauticalCharts.gov/bookletcharts</a>.

Official PocketCharts<sup>TM</sup> – PocketCharts<sup>TM</sup> are for beginning recreational boaters to use for planning and locating, but not for real navigation. Measuring a convenient 13" by 19", they have a 1/3 scale chart on one side, and safety, boating, and educational information on the reverse. They can be purchased at retail outlets and on the Internet.

Official U.S. Coast Pilot® – The Coast Pilots are 9 text volumes containing information important to navigators such as channel descriptions, port facilities, anchorages, bridge and cable clearances, currents, prominent features, weather, dangers, and Federal Regulations. They supplement the charts and are available from NOAA chart agents or may be downloaded for free at <a href="https://www.NauticalCharts.NOAA.gov">www.NauticalCharts.NOAA.gov</a>.

Official On-Line Chart Viewer – All NOAA nautical charts are viewable here on-line using any Internet browser. Each chart is up-to-date with the most recent Notices to Mariners. Use these on-line charts as a ready reference or planning tool. The Internet address is www.NauticalCharts.gov/viewer.

Official Nautical Chart Catalogs – Large format, regional catalogs are available for free from official chart agents. Page size, state catalogs are posted on the Internet and can be printed at home for free. Go to <a href="http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm">http://NauticalCharts.NOAA.gov/mcd/ccatalogs.htm</a>.

Internet Sites: <a href="https://www.Noa.gov">www.Noa.gov</a>, <a href="